CITY OF ISSAQUAH
DEVELOPMENT SERVICES DEPARTMENT
ADMINISTRATIVE REVIEW

NOTICE OF DECISION

TO: Kerry Ritland
City of Issaquah Public Works Engineering
P.O. Box 1307
Issaquah, WA 98027

SUBJECT: High Grove Storm Bypass/SE 48th St Regional Stormwater Pipeline

APPLICATION: ASDP14-00005 (Administrative Site Development Permit)

DATE OF DECISION: June 25, 2014

REQUEST: Construct a new 18-inch stormwater line to serve residential subdivisions in the SE 48th St drainage basin; to convey stormwater flows from the developments located near the edge of the Sammamish Plateau down to the valley floor. The purpose of the pipeline is to tightline peak stormwater flows down a steep ravine to bypass a natural drainage, in order to prevent erosion that could occur if stormwater was discharged at the top of the slope and headwater of the drainage. The stormwater pipe would outfall through an energy dissipater into the stream on the valley floor where the gradient is low and the increased discharge wouldn't result in channel erosion. Existing, pre-development hydrology of the stream and wetlands would be maintained.

The lower reach of the natural drainage, where the pipeline would outfall, is identified as Park Hill Creek, a Class 2 stream with salmonids. The upper reach of the drainage in the ravine is unnamed and unrated. Park Hill Creek flows under East Lake Sammamish Parkway into an unnamed drainage which flows to the north, parallel to the road and then flows west into the Lake Sammamish State Park wetland complex and into Lake Sammamish.

LOCATION: The project is located in the North Issaquah area; east of East Lake Sammamish Parkway, west of 236th Ave SE and Issaquah Pine Lake Road, south of SE 48th St, and north of SE 53rd St and the Overdale neighborhood. See attached Project Location Map.

ZONING: The linear stormwater pipeline would be located in several zoning districts, including: Single Family Small Lot (SF-SL), Single Family Suburban (SF-S), and Community Facilities – Open Space (CF-OS).

DECISION MADE: On June 25, 2014, the Development Services Department conditionally approved the Administrative Site Development Permit for the above proposal. Approval of this application is based on the submittal of April 10, 2014, Exhibits 1 through 7, and approval is subject to the following conditions:

The applicant shall comply with the SEPA Mitigated Determination of Nonsignificance issued for the project on June 11, 2014. The SEPA mitigation measures are included in the project conditions below:

1. The alignment of the stormwater pipe through the wetland buffer in Highland Terrace and in the City-owned steep slope Tract D shall avoid the removal of significant trees (over 6-inch caliper). The alignment shall be reviewed in the field by the Development Services Department prior to construction. The pipe shall be anchored on the ground surface to avoid impacts of trenching on steep slopes.
2. Significant trees that must be removed for installation of the stormwater line shall be replaced using the City's tree replacement ratio of 1 tree for every 6-inches of the caliper of trees removed. Temporary, construction impacts to vegetation shall be restored to original conditions.
3. The ground-surface pipe may be partially buried to reduce visual impacts. If the ground-surface pipe is highly visible, jute matting shall be laid over the pipe to promote vegetative growth to screen the pipeline.
4. Residential development that ties into the stormwater system shall pay their pro-rata share for the downstream improvements, as identified in the Mead & Hunt Technical Memo.
5. In order to minimize potential construction impacts related to installation of the stormwater line, no motorized equipment shall be used for access or installation of the pipeline in critical area buffers.
6. The inlet structure for the stormwater line shall be constructed so the inflow elevation is adjustable. This will allow for adaptive management; in the case that flows into the stormwater pipeline need to be adjusted in the future in order to maintain wetland/stream hydrology or adjusted to prevent flood or erosion impacts.

REASONS FOR DECISION:

1. The City of Issaquah Land Use Code definition of "minor utility facilities" includes water pipelines, outfalls, underground lines and pipes. The Table of Permitted Land Uses requires a Level 2 Administrative Site Development Permit (ASDP) for minor utilities.
2. A Level 2 ASDP is an administrative review of the project with notice to property owners within 300 feet of the site. The Notice of Application was sent to property owners on April 28, 2014 and a 14-day comment period provided.
3. The proposed stormwater line would be located in several zoning districts, including: Single Family Small Lot (SF-SL), Single Family Suburban (SF-S), and Community Facilities – Open Space (CF-OS).
4. A segment of the proposed stormwater line would be located on City-owned property zoned Community Facilities – Open Space (CF-OS). There are specific approval criteria in the Land Use Code (IMC 18.07.480) required for minor utilities in the CF-OS zone; the criteria are addressed later in this staff report.
5. A SEPA Mitigated Determination of Nonsignificance (MDNS) was prepared to evaluate the potential environmental impacts of the proposal (Exhibit 7). A comment/appeal period was provided between June 11, 2014 and July 2, 2014. SEPA mitigation measures are required as conditions of approval for this permit.
6. Critical Areas Regulations (IMC 18.10): The stormwater line would be installed in a steep

slope area, slopes greater than 40% are regulated in the City's critical areas regulations. The code allows utilities in steep slope areas *"in accordance with adopted standards.... provided that such alteration will not subject the area to the risk of landslide or erosion"* (IMC 18.10.580.D.3). The stormwater line in the steep slope area would be a flexible pipe to allow meandering around significant trees and the pipe would be installed on the ground surface to avoid ground disturbance impacts of trenching. The risk of erosion or landslides is greatly reduced by these measures.

Utilities are also allowed within wetland buffers (IMC 18.10.610.C) provided the encroachment is limited to the outer buffer area, impacts to trees are avoided, maintenance/ access roads are limited, and impacts to vegetation are mitigated. The proposal meets the code criteria.

7. The project Planning application and plans were routed to all project reviewing departments and divisions, and their comments and concerns have been addressed in this Notice of Decision.

8. Community Facilities Standards (IMC 18.07.480)

D. Approval Criteria – Public Utility Facilities:
Note: Many of the approval criteria are intended for review of structures; architectural and development standards for public buildings. This staff report will include only the approval criteria that are relevant to the proposed stormwater line.

4. Undergrounding: Public utility facilities such as communication facilities shall be installed underground or within buildings to the greatest extent practical in order to maximize safety and minimize visual and noise impacts upon surrounding properties. Public utility facilities such as distribution lines should also be installed underground in accordance with the terms and conditions established by the Washington Utilities and Transportation Commission.

Finding: The proposed stormwater line would be installed underground except where going through critical areas; the Highland Terrace wetland buffer and the Tract D steep slope area. Within critical areas, the pipe would installed on the ground surface to avoid the increased ground disturbance, impacts to tree roots, and the potential for erosion impacts from trenching of the pipeline. The ground surface pipe would also be flexible so the alignment can meander and avoid impacts to trees. If the ground surface segment is highly visible, jute matting will be required over the pipe to promote vegetative growth to screen the pipeline.

5. *Comprehensive Plan Compliance: The proposed public utility facility shall be consistent with:*

a. The need to serve the land use patterns and densities contemplated in the land use element of the Comprehensive Plan and, if applicable, the King County Comprehensive Plan;

b. The public service obligations of the servicing utility and its ability to provide service throughout its system;

c. The utilities and public services element of the Comprehensive Plan, including the goals and policies adopted therein and utility element map(s) showing the general location and capacity of all existing and proposed utility facilities.

Finding: The stormwater line is a necessary utility to serve the land use and density anticipated in the Comprehensive Plan. The stormwater line was required as a permit condition for residential subdivisions located on the Sammamish Plateau, to tightline their peak stormwater flows down a steep hillslope to bypass a natural drainage/stream in order to

prevent erosion that could occur if stormwater was discharged at the top of the slope and headwater of the drainage. The stormwater code requires tightlines down steep slopes to protect from erosion up to a 100-year storm event.

6. *Environmental Impacts: The existing natural environment of the area shall be identified, along with impacts of the proposed facility upon the natural environment, and what shall be required as mitigation.*

Finding: The SEPA environmental review process identified the existing natural environment and evaluated the potential impacts of the proposed stormwater line on the natural environment. The SEPA determination provided mitigation measures to address identified impacts, including: requirements to align and meander the stormwater pipe to avoid impacts and the removal of significant trees; to anchor the stormwater line on the ground surface in steep slope areas to avoid trenching; and for tree replacement of impacted/removed trees. In order to minimize potential construction impacts related to installation of the stormwater line, no motorized equipment shall be used for access or installation of the pipeline in critical area buffers. The SEPA determination is attached as Exhibit 7.

7. *Maintenance: Long term maintenance requirements shall be identified, funding options shall be noted, and a long term maintenance program shall be provided.*

Finding: The inlet for the stormwater pipeline will be set at an elevation for flows in excess of the 10-year storm event and excess baseflow below the 2-year event, in order to maintain pre-development stream and wetland hydrology. The inlet structure shall be constructed so the inflow elevation is adjustable. This will allow for adaptive management; if the flows into the stormwater pipeline need to be adjusted in the future in order to maintain wetland/stream hydrology or adjusted to prevent flood or erosion impacts.

10. *Screening: The public utility facility shall be screened to ensure compatibility with adjacent uses. Public utility facilities such as transformers, regulator stations, substations and other mechanical structures shall be screened with landscaping and/or other such material that provides screening during the entire year.*

Finding: Where the stormwater line is constructed above ground, through critical areas, a SEPA mitigation measure and condition requires jute matting to cover the pipe to promote quick vegetative growth to screen the pipeline. This would reduce any visual impact of the utility in protected natural open space areas.

11. *Major or minor utilities that will be sited within the Community Facilities Open Space (CF-OS) zone shall meet the following criteria for an alternative analysis report as well as the aformentioned criteria of this section:*

    a. *Economic Analysis: Costs associated with the use of each alternative site shall be established, including appraised value, acquisition costs, neighborhood impacts, and the intrinsic value of the open space to the neighborhood, City, and natural resources of the area.*

    Finding: The stormwater pipeline has limited alternatives for siting or locating the line; the alignment is fixed to serve approved residential developments and designed to maintain gravity flow. There was an evaluation of the route alternatives through the Highland Terrace subdivision. If the stormwater line followed SE 51st St through Highland Terrace, it would require trenching approximately 13 feet deep (typical

trenching is 4 feet deep) due to the topography and this depth of trenching would have an impact on the existing neighborhood. Therefore, an alignment through the outer portion of the wetland buffer, already encumbered with an existing public storm system, was selected for the stormwater line route.

b. Natural Resource Analysis/Assessment: The analysis shall be conducted for site alternatives located within the CF-OS zone and shall generally include an analysis of the site's geologic, biological, scenic and visual, cultural/archaeological, water quantity and quality, and recreational resource values. The analysis shall:

(1) Address and demonstrate how the project proposal will affect the aforementioned natural resources individually or cumulatively;

(2) Evaluate potential impacts to habitat types of sufficient size necessary to support any species present;

(3) Demonstrate how habitat corridors with adequate cover and width to allow for unrestricted movement of animals between areas of intact habitat shall be maintained;

(4) Evaluate the impacts of locating land uses adjacent to habitat types and corridors that require minimal disruption of the needs of species present in the habitat type through direct or indirect means.

Finding: The SEPA determination conducted a detailed analysis of project impacts on natural resources (geologic, biological, water quantity/quality, etc.) present in City-owned Tract D, the CF-OS zoned parcel. This segment of the project was specifically designed to protect natural resource and habitat values; the tightline would prevent stormwater discharge at the headwaters of the drainage protecting the parcel from slope/channel erosion and associated water quality impacts, the stormwater pipe would be installed on the ground surface to avoid trenching that could result in erosion impacts, the pipe would be flexible to avoid tree removal, and the stormwater pipe would not barrier or obstruct wildlife movement. SEPA mitigation measures provide contingency requirements if impacts cannot be avoided, including requirements for tree replacement.

c. Watershed Protection Analysis: Because the CF-OS zones within the City are located within the watershed of a salmon bearing creek, the alternative analysis report shall:

(1) Prepare and include an appropriate plan to protect listed or threatened species present (e.g., chinook, salmon and bull trout);

(2) Provide for the long term protection of aquatic species;

(3) Require the maintenance of habitat forming processes including delivery/routing of sediment, delivery/routing of water quantity, delivery/routing of woody debris and delivery/routing of carbon;

(4) Generally provide an analysis of potential impact on streams within the watershed where anadromous fish are present;

(5) Use watershed planning tools such as the river basin characterization methodology.

Finding: The purpose of the stormwater tightline is to protect the stream channel from erosion and sedimentation impacts that could affect downstream water quality and

salmonid habitat. The proposal has been designed to maintain pre-development flows to wetlands and the stream to preserve existing watershed processes. Protection of the watershed and salmonid habitat was a primary consideration in the design of the project and in the SEPA analysis.

d. Mitigation Measures: The alternative analysis report shall suggest mitigation measures as reviewed at the project review meeting, to offset the negative impacts associated with the project development. These mitigation measures shall be addressed in the normal project/permit review process.

Finding: The proposal is generally the implementation of previous development project mitigation. Development permits for residential subdivisions located in the SE 48th St drainage basin were conditioned to require the developments to connect to the proposed stormwater line in order to protect the hillside section of the stream, to protect the natural resource and open space values of the CF-OS zoned parcel. SEPA mitigation measures are required to off-set the potential negative impacts of the stormwater line project.

Time Limit of Approval:
The final decision approving the Administrative Site Development Permit is valid for three years as specified by IMC 18.04.220-C-5, or as amended by the Land Use Code.

EXHIBIT LIST:

1. Administrative Site Development Permit application, ASDP14-00005, received 4-10-2014
2. Project Location Map
3. SE 48th Street Regional Stormwater Pipeline Project Description, received 4-10-2014
4. Technical Memo - Eastlake Sammamish Parkway SE Storm water Drainage Improvements, Mead & Hunt, dated March 19, 2013
5. Project Plans, received 4-10-2014
6. Environmental Checklist, received 4-10-2014
7. SEPA Determination, issued on 6-11-2014

Peter Rosen

Peter Rosen, Senior Environmental Planner

6/25/2014

Date